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Reply to Office Action of September 9, 2004

REMARKS

In view of the following remarks, Applicants respectfully request entry of the present reply, and that the Examiner withdraw all rejections and allow the currently pending claims.

Status of Claims

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing changes to the claims. In the present reply, claim 25 has been added. Claims 9, 10, 14-16 and 21-24 stand withdrawn. Thus, in the present application, claims 1-25 are pending.

No new matter has been added by way of claim 25 since this claim has support in the original claims and in the Examples of the present specification (*i.e.*, see Example 1, page 34, lines 20+; Examples 2-3 at page 35, lines 14 and 22+; etc.). Also, see paragraph 11 of the Office Action.

Based upon the above considerations, entry of the present amendment is respectfully requested.

Election/Restriction

Claims 9, 10, 14-16 and 21-24 stand withdrawn. Applicants note the Examiner's comments in paragraph 2, page 2 of the Office Action. However, Applicants submit that M.P.E.P. § 821.04 does not

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require traversal to have a rejoinder of any pending process claims.

Issues under 35 U.S.C. §§ 102(b) & 103(a)

Claims 1-8, 11 and 17-20 stand rejected by the Examiner under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) over U.S. Patent No. 4,220,579 to Rinehart ("Rinehart '579"), U.S. Patent No. 4,239,862 to Matthews ("Matthews '862"), or U.S. Patent No. 4,311,628 to Abdou-Sabet et al. ("Abdou-Sabet '628") (see paragraph 4 of the Office Action).

Also, claims 1-8, 11-13 and 17-20 stand rejected by the Examiner under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) over U.S. Patent No. 4,728,692 to Sezaki et al. ("Sezaki '692") or U.S. Patent No. 4,818,785 to Ottawa et al. ("Ottawa '785") (as stated in paragraph 5 of the Office Action).

These rejections are respectfully traversed, and reconsideration and withdrawal thereof are respectfully requested.

The Present Invention

The present invention as recited in claim 1 relates to a fully or partially crosslinked olefinic thermoplastic elastomer composition comprising 10 to 90 parts by weight of a crystalline

polyolefin (a), 90 to 10 parts by weight of an olefin-based copolymer rubber (b) (the total amount of the components (a) and (b) being 100 parts by weight) and 3 to 100 parts by weight of a paraffinic mineral oil softening agent (c) having an evaporation loss of 0.4% by weight or less at a condition of 200 °C, atmospheric pressure and 1 hour and having a kinetic viscosity (40 °C) of 50 to 250 cSt.

The cited references fails to disclose all features and unexpected advantages of the present invention as follows.

The Examiner's response, and Applicants' response thereto citing distinctions over cited references

The Examiner responds to Applicants' previous arguments (of June 21, 2004, and July 13, 2004) in paragraphs 6-11 of the Office Action. For instance, in paragraph 10 of the outstanding Office Action, the Examiner states that the compositions of the cited references, including compositions disclosed as having the same claimed paraffinic oils, would possess the instantly claimed properties. Essentially, the Examiner states that the cited references, like Rinehart '579 and Matthews '862, disclose the same or similar flash points and density properties as exhibited by the present claimed compositions (e.g., see paragraph 9 of the Office Action), and that no conclusion of unexpected results for the

present invention can be deduced. However, the Examiner has not specifically referred to the unexpected results shown in the Rule 132 Declaration filed on July 14, 2004 regarding the antifogging property of the present invention. Accordingly, reconsideration of the Declaration's experimental results is requested.

In this regard, Applicants respectfully maintain that each of the cited references fails to disclose or suggest a composition having the instantly claimed properties. Specifically, the claimed invention uses paraffinic oil having an evaporation loss of 0.4% or less. In this regard, Applicants herein submit a revised Rule 132 Declaration by co-inventor Kunihiro Mizumoto that shows that the paraffinic oil, as instantly claimed (see paragraph 10 of the Office Action, wherein the Examiner emphasized what is claimed), leads to unexpected results for the present invention.

As can be seen from the attached or previously submitted Declaration, the claimed invention is patentable over each of the cited references since the references use commercially available paraffinic oils having an evaporation loss of more than 0.4%. As compared to the present invention, the paraffinic oils described in the cited references have a molecular weight of 530-550 and have properties which are similar to those of Sun Par 150, Super Oil M100 and a paraffinic oil (c-3) of Idemitsu Kosan Co. known by the Tradename "PW-90". Thus, the commercially available paraffinic

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oils, such as "Tufflo 6056", have an evaporation loss of more than 0.4%. Applicants' position is further supported by the attached and recently filed Rule 132 Declarations and the supplemental chart provided below.

In the attached or previously submitted Rule 132 Declaration, an olefinic thermoplastic elastomer composition was produced [molded] as in Example 6 of the present specification, except a mineral oil softening agent Tufflo 6056 was used (to represent the closest example of the cited references). The results are shown in Table 1 on page 2 of the Declaration.

Accordingly, as seen from the Rule 132 Declarations, Applicants respectfully submit that the claimed invention provides an olefinic thermoplastic elastomer composition having unexpectedly superior antifogging properties (e.g., low hazing property) by using paraffinic oil having an evaporation loss of 0.4% or less. With regard to paragraph 10 of the Office Action, Applicants respectfully refer the Examiner to the paragraph bridging pages 2-3 of the attached Declaration. This superior and unexpected feature of low hazing property due to the better evaporation loss of the paraffinic oil is nowhere disclosed or recognized in any of the cited references. Even in Applicants' previous reply of July 14, Applicants stated that the haze (%) property of the instant

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invention versus that of Tufflo 6056 is superior and unexpected (see page 3, last paragraph of the reply).

Also in Applicants' previous reply, Applicants stated that the paraffinic oils like Tufflo 6056 have an evaporation loss of more than 0.4% (outside what is instantly claimed). Thus, Applicants properly compared the haze (%) property of the prior art example with the present invention. It is also appropriate to compare to just one unexpected property of the present invention under U.S. case law. See *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987) (holding that a new compound is patentable based on unexpected results in one of a spectrum of common properties). Thus, Applicants respectfully request reconsideration of the unexpected results of the previously submitted Declaration because it appears that not all experimental results have been appropriately considered and compared to the cited references by the Examiner (*i.e.*, see paragraph 9 of the Office Action).

Further, in view of the Examiner's comments in paragraph 9 of the outstanding Office Action, Applicants revise and supplement the experimental data regarding Tufflo 6056 in the Declaration as follows:

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Table

		Sun Par 150	Tufflo 6056	Matthews et al.	PW-90	Super Oil M100	Exp. 1 (c-1)	Exp. 2
kinetic viscosity	(cSt)	93.9 ¹⁾	103.5 ⁴⁾		87.6	97.1 ²⁾	102.3	97.25
viscosity index					103	96 ²⁾	103	103
Flash point	(°C) (°F)	256 ¹⁾	249 ⁴⁾ 480 ⁴⁾	232 450	256	268 ²⁾	274	274
pour point	(°C) (°F)	-15 ¹⁾	-7 ⁴⁾ 20 ⁴⁾		-15	-12.5 ²⁾	-15	-15
density	(g/cm ³)	0.872 ¹⁾	0.8762	0.8762	0.8691	0.886 ²⁾	0.8709	0.8705
molecular weight		530 ¹⁾	530 ⁴⁾	550	540			
evaporation loss	(%)	0.7 ³⁾	0.72 ⁵⁾		0.77	0.6 ³⁾	0.22	0.26

1) quotation from technical bulletin by Japan Sun Oil Company, Ltd. (Annex 2 attached to our letter of March 24, 2003)

2) quotation from catalog by ENEOS (Annex A attached to the Reply dated November 19, 2003)

3) quotation from information by the oil maker

4) quotation from product information by CITGO (Annex B), [http://www.jhwoil.com/products/citg_products/citgo_process_oils/citgo_tufflo_6000_series_process_oils.pdf]

5) determined by the method described at page 33 in the present Specification.

(Applicants note that Annex B from "4)" above is attached to this reply). As can be seen from the Table above, Tufflo 6056 does not meet the requirements of "an evaporation loss of 0.4% by weight or less". Thus, the cited references do fail to disclose all features as instantly claimed as Applicants have asserted. Accordingly, Applicants respectfully submit that the instant rejections have been overcome as explained below.

Request for withdrawal of § 102(b) rejections

As mentioned above, each of the cited references fails to disclose the claimed evaporation loss for the paraffinic mineral oil softening agent (c). Instead, commercially available paraffinic oils, such as "Tufflo 6056" (the closest prior art example), are used, which have an evaporation loss of more than 0.4%. Because "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," each of the cited Rinehart '579, Matthews '862, Abdou-Sabet '628, Sezaki '692 and Ottawa '785 cannot be a basis for a rejection under § 102(b). See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Thus, because of the lack of disclosure of all features as instantly claimed, the instant rejections under § 102(b) are overcome. Reconsideration and withdrawal of these rejections are respectfully requested.

Request for withdrawal of § 103(a) rejections

As mentioned above, each of the cited references fails to disclose the claimed evaporation loss for the paraffinic mineral oil softening agent (c). Thus, a *prima facie* case of obviousness has not been established. This is because U.S. case law squarely holds that a proper obviousness inquiry requires consideration of

three factors: (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations; (2) whether or not the prior art would have taught, motivated, or suggested to those of ordinary skill in the art that they should make the claimed invention (or practice the invention in case of a claimed method or process); and (3) whether the prior art establishes that in making the claimed invention (or practicing the invention in case of a claimed method or process), there would have been a reasonable expectation of success. See *In re Vaeck*, 947 F.2d, 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). Here, not even the first requirement of disclosure of all claimed features has been satisfied. Thus, Applicants submit that all rejections under § 103(a) have been overcome. Reconsideration and withdrawal of these rejections are respectfully requested.

Further, Applicants respectfully submit that unexpected results exist for the present invention, whereby these unexpected results rebut any asserted *prima facie* case of obviousness based on the cited modifications or combinations of the cited references. As can be seen from the Rule 132 Declaration herein filed, as well as can be seen from the supplemental data above, the claimed invention unexpectedly achieves, e.g., a better or superior haze (%) property over the cited references. Accordingly, Applicants

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respectfully submit that the unexpected results of the present invention rebut any asserted rejection under § 103(a).

Additional distinctions: further lack of disclosure of all claimed features and non-enablement of references

In paragraphs 7-8 of the outstanding Office Action, the Examiner states that the cited references are presumed to be operable, and that the disclosed "PW 380" of Ottawa '785 discloses the instantly claimed evaporation loss of the paraffinic mineral oil softening agent (c). Applicants respectfully traverse.

First, with regard to paragraph 8 of the Office Action, Applicants respectfully submit that the PW '380 of Ottawa '785 does not disclose all claimed features. The properties of PW 380 are indicated in Table below.

Table

		PW 380
kinetic viscosity	(cSt)	382
Viscosity index		110
flash point	(°C)	300
pour point	(°C)	-15
density	(g/cm ³)	0.877
molecular weight		746
evaporation loss	(%)	0.05

As mentioned in Applicants' reply of June 21, 2004, Example 12 in Ottawa '785 uses the process oil (produced by Idemitsu Kosan Co.: trade name PW 380) that is compounded in the oil-extended rubber (A-1) used in Example 5 of the present application (see page 38,

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lines 2-3 from the bottom, of the present specification). However, as seen from the Table above, PW 380 does not meet the requirements of "a kinetic viscosity (40 °C) of 50 to 250 cSt" as presently claimed. There is no disclosure of all claimed features. Thus, this is an additional distinction of the present invention over the cited references, wherein Applicants request withdrawal of the instant rejections.

Further, paraffinic oil having a kinetic viscosity (40 °C) of more than 250 cSt (see Table above for PW 380) is inferior in handling property. Thus, this is another reason that Applicants request withdrawal of all outstanding rejections since different paraffinic oils are used.

Second, with regard to paragraph 7 of the Office Action, and in view of the above comments, Applicants respectfully refer the Examiner to the chart above (properties of Tufflo 6056 are shown). Thus, none of the cited references, including Matthews '862, Abdou-Sabet '628 and Sezaki '692 (see Applicants' reply of November 19, 2003, page 13, last paragraph) discloses or recognizes both of the claimed features of "an evaporation loss of 0.4% by weight or less" and "a kinetic viscosity (40 °C) of 50 to 250 cSt". The instant claims are distinguishable from the cited references based on the claimed features as mentioned above. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

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Conclusion

Applicants respectfully submit that all rejections have been overcome due to the various reasons stated above.

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Pursuant to 37 C.F.R. 1.17 and 1.136(a), the Applicants respectfully petition for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$120.00 is attached.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

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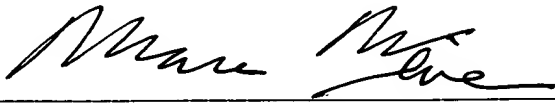
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required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Declaration under 37 C.F.R. § 1.132 (by Kunihiro Mizumoto)
Annex B: literature from Citgo website
[http://www.jhwoil.com/products/citgo_products/citgo_process_oils/citgo_tufflo_6000_series_process_oils.pdf]